

WHAT IS CLAIMED IS:

1. A method for controlling the target bit error rate of each packet in wired and wireless video communication systems, which controls the target BER of the said video packet depending on the importance of the entire decoded image quality of the said video packet.

2. The method of claim 1 wherein the said importance of the video packet is determined by at least one of the followings;

(1) estimated distortion value which is estimated even though the error concealment of the error occurred during transmitting of said video packet is performed, and

(2) the number of the wireless channel through which the said video packet passes.

3. The method of claim 2 wherein the target BER is controlled small after determining the video packet as having high importance if the said estimated distortion value is high, and

the target BER is controlled large after determining the video packet as having low importance,

if the said estimated distortion value is low.

4. The method of claim 3 wherein a transmitting encoder estimates the estimated distortion value of 5 the said video packet as performing the error concealment function for the said video packet to be transmitted.

5. The method of claim 2 wherein a hardware which 10 performs the same error function as or the similar error function to the receiving decoder specially prepared at the said transmitting encoder estimates the estimated distortion value of said video packet.

15 6. The method of claim 3 wherein a hardware which performs the same error function as or the similar error function to the receiving decoder specially prepared at the said transmitting encoder estimates the estimated distortion value of said video packet.

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7. The method of claim 4 wherein a hardware which 25 performs the same error function as or the similar error function to the receiving decoder specially prepared at the said transmitting encoder estimates the estimated distortion value of said video packet.

8. The method of claim 2 wherein a hardware which performs the error concealment function installed on the transmitting decoder estimates the estimated distortion value of said video packet.

9. The method of claim 3 wherein a hardware which performs the error concealment function installed on the transmitting decoder estimates the estimated distortion value of said video packet.

10. The method of claim 4 wherein a hardware which performs the error concealment function installed on the transmitting decoder estimates the estimated distortion value of said video packet.

11. The method of claim 2 wherein the target BER of video packet which passes through the said wireless channel is controlled smaller in the wired channel compared to the target BER which doesn't pass through the wireless channel.

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25 12. The method of claim 2 wherein the target BER of video packet which passes more often through the said wireless channel is controlled smaller in the

wireless channel compared to the target BER which less often through the wireless channel.

13. The method of claim 11 wherein the target BER
5 which passes more often through the said wireless channel is controlled smaller in the wireless channel compared to the target BER which passes less often through the wireless channel.

10 14. A method wherein the transmitting part transmits the coded video data to receiving part in wired and wireless video communication systems, which comprises the steps of;

15 (1) dividing the said video data into packet unit,
0 (2)controlling the target BER for the each said divided packet controls depending on the importance of the corresponding video packet for the entire decoded image quality, and

20 (3)managing the said video packet to satisfy the target BER and is transmitted.

15. The method of claim 14 wherein the importance of the video packet at the said 2nd step is determined by at least one of followings;

25 (1)the estimated distortion value which

estimates the occurred distortion even though the error concealment for the error during transmitting of said video packet is performed, and

(2) the number of the wireless channel through

5 which the said video packet passes.

10. The method of claim 15 wherein the target BER is controlled small after determining the video packet as having high importance if the said estimated distortion value is high, and

the target BER is controlled large after determining the video packet as having low importance, if the said estimated distortion value is low.

15. The method of claim 15 wherein the target BER of the video packet which passes through the said wireless channel is controlled smaller in the wired channel compared to the target BER which doesn't pass the wireless channel, and

20 the target BER of the video packet which passes more often through the said wireless channel is controlled smaller in the wireless channel compared to the target BER which passes less often through the wireless channel.

18. The method of the 3rd step of claim 14 wherein the FEC method is used to satisfy the target BER of said video packet.

5 19. The method of the 3rd step of claim 18 wherein the constraint length is extended or the code rate of the convolution coding or turbo coding is made high if the target BER is small due to the high importance of the said video packet.

10 20. The method of the 3rd step of claim 18 wherein many channel coding bits of Reed-Solomon code or BCH code are added if the target BER is small due to high importance of the said video packet.

15 21. The method of the 3rd step of claim 14 wherein the method for controlling the transmitted power in the wireless channel area is used to satisfy the target BER of said video packet.

20 22. The method of the 3rd step of claim 21 wherein transmitted power is allocated as follow;

(1) allocating high transmitted power if the importance of said video packet is high, and

25 (2) allocating low transmitted power if the

importance of said video packet is low.

23. The method of claim 14 wherein the said video packet is transmitted with the information by which 5 the target BER of the said video packet can be calculated.

24. A recording medium which can be read by the computer on which the program is recorded for 10 performing the video transmission method which comprises the steps of;

- (1)dividing the said video data into packet unit,
- (2)controlling the target BER for the each said divided packet controls depending on the importance of 15 the corresponding video packet for the entire decoded image quality, and
- (3)managing the said video packet to satisfy the target BER and is transmitted.